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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/756,554	01/08/2001	Leon Bruckman	6727/11142US1	5698

7590 05/10/2004
DARBY & DARBY P.C.
805 Third Avenue
New York, NY 10022

EXAMINER

NG, CHRISTINE Y

ART UNIT	PAPER NUMBER
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2663

DATE MAILED: 05/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/756,554

Applicant(s)

BRUCKMAN, LEON

Examiner

Christine Ng

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 January 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8, 11-16, 19 and 22 is/are rejected.
- 7) ☒ Claim(s) 6, 7, 9, 10, 17, 18, 20 and 21 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 January 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 2, 4, 8, 11-13, 19 and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,553,003 to Chang.

Referring to claims 1 and 12, Chang discloses in Figure 1 a method for transmitting data over a channel having a variable transmission rate. Refer to Column 1, lines 20-23. The method comprises:

Determining the rate of transmission (19.2 kbps or 9.6 kbps) of the data over the channel (CDMA radio channel). An 93-byte RLP frame, initially transmitted at a data rate of 38.4 kbps, needs to be retransmitted at a lower data rate of 19.2 kbps or 9.6 kbps. Refer to Column 4, lines 8-13.

Receiving a datagram (93-byte RLP frame) for transmission over the channel (CDMA radio channel) at the determined rate of transmission (19.2 kbps or 9.6 kbps). The 93-byte RLP frame is retransmitted at a lower data rate of 19.2 kbps or 9.6 kbps. Refer to Column 4, lines 8-13.

Dividing the datagram (93-byte RLP frame) into fragments of a size no greater than a size limit that is set for the datagram responsive to the determined rate of transmission (19.2 kbps or 9.6 kbps). The 93-byte RLP frame is segmented into the frames having the size permissible at the lower data rate of 19.2 kbps or 9.6 kbps. Refer to Column 4, lines 13-14. For 19.2 kbps, the 93-byte RLP frame is segmented into two 45-byte blocks and one 3-byte block. For 9.6 kbps, the 93-byte RLP frame is segmented into four 21-byte blocks and three 3-byte blocks. Refer to Column 4, lines 24-28.

Transmitting the fragments over the channel (CDMA radio channel). Refer to Column 3, lines 52-59.

Referring to claims 2 and 13, Chang discloses that the rate of transmission is in a range between about 100 kbps and about 2300 kbps. Refer to Column 3, lines 31-50.

Referring to claims 4 and 15, Chang discloses in that the datagram (93-byte RLP frame) comprises a data packet. Refer to Column 1, lines 20-23 and Column 2, lines 9-14.

Referring to claims 8 and 19, Chang discloses in that dividing the datagram (93-byte RLP frame) into fragments comprises increasing the size limit as the rate of transmission increases. As shown in Table 1, which shows the "maximum frame lengths permissible at the associated data rates", the size limit of the frame increases as the data rate increases. Refer to Column 3, lines 31-50.

Referring to claims 11 and 22, Chang discloses that the method comprises receiving the fragments over the channel (CDMA radio channel) at a receiver, and

processing the fragments responsive to the variable rate of transmission so as to reassemble the datagram (93-byte RLP frame). "With respect to frame segmentation, the conventional radio link protocol provides a frame segmentation and reassembly method" (Column 3, lines 56-58). "As the data rate increases, the receiving part then reassembles the received frame having sequence number R and the following frames according to the new data rate" (Column 5, lines 62-65).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,553,003 to Chang in view of U.S. Patent No. 5,999,565 to Locklear Jr. et al.

Chang does not disclose that the channel comprises a Digital Subscriber Line (DSL) network access channel.

Locklear Jr. et al discloses in Figure 1 a channel (Elements 12, 22 and 16) comprising a DSL network access channel. Information "associated with a session passes between device 12 and server 16 using a modifiable number of XDSL modems and associated twisted pair lines 22" (Column 3, lines 30-32). Device 12 and server 16 support high bandwidth data services in the local loop using various forms of DSL including ADSL, HDSL and VDSL. Refer to Column 3, lines 59-65. Device 12 also

performs fragmentation of packets based on the data rate capacity of its modems.

Refer to Column 2, lines 49-61 and Column 11, lines 16-35. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include that the comprises a DSL network access channel; the motivation being that DSL provides support for high speed data transmissions since there is an "increasing demand for data communications at higher rates" and Internet sessions "require high data rates to accommodate multimedia information" (Column 1, lines 18-22).

5. Claims 5 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,553,003 to Chang in view of U.S. Patent No. 5,173,898 to Heinzmann et al.

Chang does not disclose that dividing the datagram comprises setting the size limit such that a length of time required to transmit each of the fragments is no greater than a predetermined maximum time.

Heinzmann et al disclose in Figure 2 that that dividing a datagram (frame) comprises setting the size limit such that a length of time required to transmit each of the fragments (equal-sized segments) is no greater than a predetermined maximum time (length of a time slot). A frame is "cut into equal-size segments (payloads) which fit into the fixed-length data segment fields of the time slots" (Column 3, lines 60-65). Each time slot contains a segment payload and an associated header. If the payload segment does not fit into the entire time slot, padding data is added to fill up the time slot. Refer to Column 4, lines 12-19. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include that dividing the

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datagram comprises setting the size limit such that a length of time required to transmit each of the fragments is no greater than a predetermined maximum time; the motivation being that if a message frame is too long to fit in a single assigned time slot, it is divided into segments; each segment is assigned a time slot to be transmitted in and does not exceed the length of the time slot.

Allowable Subject Matter

6. Claims 6, 7, 9, 10, 17, 18, 20 and 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

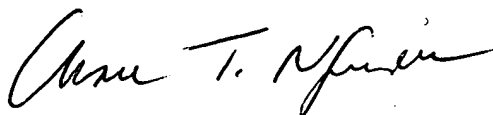
Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christine Ng whose telephone number is (703) 305-8395. The examiner can normally be reached on M-F; 8:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nguyen Chau can be reached on (703) 308-5340. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

C. Ng
May 3, 2004



CHAU NGUYEN
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